

The CHEMIST

Bulletin of
THE AMERICAN INSTITUTE of CHEMISTS, Inc.

VOLUME VII

DECEMBER, 1929

NUMBER 2

Why The CHEMIST?

American Chemistry is over-organized technically and under-organized professionally. There are over a dozen American technical chemical organizations, but there are only two professional organizations, *The American Institute of Chemical Engineers* and *The American Institute of Chemists*.

WHAT ABOUT PUBLICATIONS?

A similar situation exists. We have excellent technical publications in ample number but we have only one professional publication—*The CHEMIST*.

Even the student of chemistry has his own publication now; *The Chemistry Leaflet* is covering this field efficiently and with growing influence for good. *The Journal of Chemical Education* is doing splendid work among teachers and more advanced students. The technical publications of the American Chemical Society are now world leaders in the fields they cover.

The business and trade side of chemistry has such journals as *Chemical Markets*, *The Oil, Paint and Drug Reporter*, *Chemicals*, etc. *Chemical and Metallurgical Engineering* covers another phase, and there are numerous journals such as *The Journal of Biological Chemistry*, *Rheology*, etc., covering special branches.

But after you have educated your chemist and given him the means of intellectual growth and production, the problem still remains of giving him a professional outlook, with solidarity and professional co-operation. This *The CHEMIST* is striving to do.

We Want to Enlarge The CHEMIST

We want it to be a medium of frank discussion.

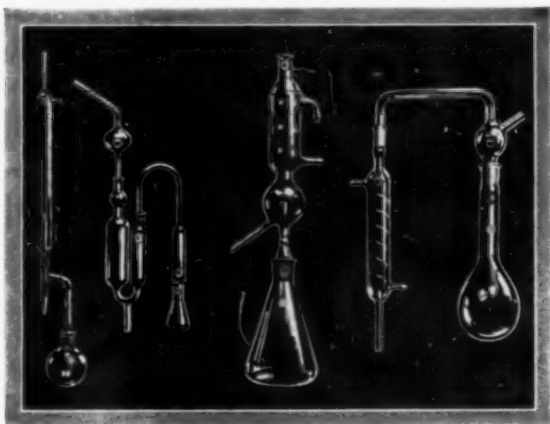
We want your ideas and opinions.

We want signed articles.

We want the rank and file of our membership to regard *The CHEMIST* as their voice.

WHAT ARE YOU DOING TO HELP?

A few of the assemblies made from standard PYREX parts and obtainable from stock.



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The CHEMIST

Bulletin of

THE AMERICAN INSTITUTE OF CHEMISTS, INC.

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COUNCILORS

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VOLUME VII

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EDITORIAL

Ave Atque Vale

Your titular editor has not been able to devote as much time to The Chemist as the needs of this sprightly little journal demand. Three trips to Europe within one year, a visit to the Pacific Coast and several to the Gulf Coast within the same period have interfered with his devotion to a task he enjoys. This is therefore the last number of The Chemist to be issued under his direction.

So he has resigned. Miss Florence E. Wall will be the new Editor. As she has already issued several numbers of The Chemist she has demonstrated her ability to carry on.

May the almost ex-editor express a few words in the first person?

One of the most important events of the present year in the life of the Institute is the victory of the New York City chemists who have obtained not only an important salary increase, but what is in my mind even more important, recognition of their professional status and the promise of a suitable system of grading. But far above and beyond even these achievements in which the Institute played no mean part is the outstanding fact that the men involved played their parts like men. They marshalled their facts and figures. They risked the displeasure of uninformed official and unofficial superiors and they co-operated with the Council. The men deserved their success; the Institute can be proud of the part it played. I suggest that other groups of chemists study the experience and the activities of the Association of Municipal Chemists and draw inspiration and wisdom therefrom.

A periodical like The Chemist is a difficult paper to make attractive. The staff has tried and perhaps some measure of success has been attained. It is the official organ of the Institute and thus its editorials represent the views of the Council. But it should and must express the opinions of the membership at large. Its pages are open to short, concise, *signed* expressions of opinion by the membership. I urge members to express their views. We succeed or we fail as an Institute on the basis of our policies and the support of the membership. *Your* opinion helps mold the policies of the Institute. Participate in the formulation of policy, support the policy and benefit from the achievement of the policy of the Institute. Unified power is effective power.

Your officers are truly your servants. The Chemist is truly your journal. Help both; help yourselves.

ALBERT P. SACHS

AS OTHERS SEE US

The "Scientific Worker" (Letchworth), in its October, 1929, issue, carries the following notice, entitled "Professional Ethics" which we are sure will interest our readers and which we reprint without comment:

In The Journal of the Institute of Chemistry for August is printed in extenso the code of professional conduct and ethics which the American Institute of Chemists has formulated for the guidance and adherence of its members. Certain articles of this code appear to relate to the conduct of any self-respecting citizen rather than to that of a professional chemist. The code, in fact, appears to us to be rather more pretentious and sentimental than practical. It leaves far too much to the individual member's interpretation of the rules laid down for his guidance. It says, for example, that "He shall, *as far as possible*, in consulting work, fix fees at a point high enough to warrant complete and adequate service" (the italics are ours). It is not difficult for a needy chemist to justify any charge on this basis. In our opinion the code would be greatly strengthened if the American Institute of Chemists prepared a schedule of minimum charges for an adequate variety of professional work and requested its members not to undertake commissions from clients at less than these minimum charges. Other articles of the code are open to the same kind of objection. Nevertheless, the attempt is a praiseworthy one. Something of the kind is badly needed in Great Britain, but we should prefer that the code of professional ethics should not be confined to chemists, but should be so drawn up as to be of general application to all professionally qualified scientific workers. Some time ago we asked our members to forward suggestions for a code of professional ethics for scientific workers, but there was very little response. We hope still that our members will give this matter their attention.

Help to double the circulation of *The CHEMIST*. Pass this copy on to some Chemist who is not yet a member of the Institute.

ADVERTISERS & ADVERTISING

THE CHEMIST can accept some more advertising. In fact, THE CHEMIST is anxious to get some more advertising. The circulation is small, but select and powerful. General advertising in these pages would be unprofitable but certain specialized advertising will prove remunerative. Laboratory supply houses, technical publishers and those seeking highly specialized services or specially trained men, and those endeavoring to deliver a unique message to a selected group will find THE CHEMIST able to render effective service. Any member who knows an advertiser who would benefit by publicity in THE CHEMIST should inform the Editor. Specimen copies of THE CHEMIST will gladly be sent to anybody upon request.

FACING OUR ECONOMIC PROBLEMS¹

By GEORGE BARSKY

It is not necessary to tell members of this Institute that we, as chemists, have many interests in common besides our science and technology. We have the very close bond of all earning our living in the same field, and of facing the same economic problems, such as looking for a job and trying to acquire a degree of economic security. We can all confess a certain amount of inertia in bringing ourselves to discuss these problems, even among ourselves, although we are ready to plunge into discussion of chemical problems that affect us much less vitally and much less universally.

Co-operative Action

Because this Institute gives definite consideration to the economic problems of the profession, it has in the past been referred to by some people as an attempt at a union and that label has, in certain quarters, militated against the Institute. The word "union" conveys first the subconscious idea of strikes, riots and similar disagreeable affairs. Such a thing as a strike of chemists not only is most foreign to our thoughts but would be positively silly, as production can go on very extensively and for a considerable time without chemists. Another objectionable idea is that of uniformity, of regimentation, of each man being capable of filling the other man's job. One bricklayer will lay a thousand bricks a day according to a blue print, and any other bricklayer can do the same job. We resent any attempt at standardization, of the creation of a stereotyped personality, and naturally so. Our work requires personal responsibility, individuality and originality.

But all this does not mean that with all our differences in abilities in the extent and field of special knowledge, we do not have economic problems that can be solved best by co-operative action. I know of no field of endeavor in which

individual talent and personality vary more widely than that of the stage. Yet the prima donna and the "one line man" have improved conditions remarkably through their Actors' Equity Association.

Have you ever tried to estimate what a large economic force the chemists of the country represent, disregarding for the time the value created for the account of others? There are about 17,000 members of the American Chemical Society. Assuming 5,000 are members of other professions, dilettantes, etc., we may safely assume at least 12,000 persons actively engaged in earning a livelihood at chemistry. A very conservative figure for the average salary of the 12,000 would be \$3,000 per year. From this we may calculate that the total income of the profession is thirty-six million dollars. This is the income of an investment of approximately five hundred million dollars. This is what we represent to ourselves.

Our income is distributed in the purchase of goods which we consume, in rent, taxes and so forth, a part is reserved as insurance against emergencies such as ill health and unemployment and a portion saved for security in later years.

In modern American industrial life it is customary and really necessary for groups of persons or corporations to unite into associations for the good of the common cause. There are about nine thousand such groups in the United States. The general idea is old. There has been a gradual change from the old craft guilds to the modern trade union and trade and industrial associations. Some of these associations are looked upon with suspicion as combinations to keep up prices of commodities or of services but these associations have been useful in stabilizing industries to a certain extent. With limitations, price fixing and regulated competition have their advantages. Oth-

¹ An address before the N. Y. Chapter of the A. I. C., Nov. 15, 1929.

erwise, for example, a reckless producer can ruin an industry, or a manufacturer without an adequate cost system can force all the others to sell at loss.

Because we chemists have interests in common does not mean that they are antagonistic to the interests of other groups or to the interests of the community in general. It is somewhat a new idea, but widely accepted in recent years, that high wages to labor are responsible for the change in conditions known as American Prosperity. Here we have a case that would at one time have been considered quite anomalous—that high wages mean better business. Furthering interests of labor actually resulted in improving general business.

Similarly the interests of the chemists are really the interests of the community. Active, contented, far-sighted chemists without the worry of uncertain future, with time for study and exercise of imagination will certainly mean more discoveries, more inventions, more rapid development of industry and more intensive application of science to the comfort and happiness of man.

Changes in Professional Practice

I think a short history of our status as producers of chemical services, i. e., of the practice of the profession of chemistry, will be of interest. The first practitioners were medical men and apothecaries. (This is one reason we look to the medical profession for guidance in some of our problems.) Then there grew up the profession of analytical chemistry. Practitioners had clients who submitted samples and who paid fees. Subsequently the analytical chemist was drawn into the works as a control chemist; he became an employee. He enlarged his activities to include works improvements and there gradually evolved the chemical engineer and the research and development staffs so common today. The various branches also underwent changes. The development of research along medical and biological lines was accompanied by the growth of the fields of research along

the lines of physiological chemistry, food chemistry and the application of chemistry to the study of life processes themselves. The chemist has followed the medical research worker into the governmental and semi-public institutions where he too is an employee. The public analysts have given way to consulting firms employing staffs of chemists. Lately there has been arising a new branch concerned quite directly with sales, that of the sales chemist, similar in function to the sales engineer. We also have with us now the chemist-adviser to the banker and investor.

The general chemist is disappearing as the field of knowledge increases by leaps and bounds. Only groups of specialists can carry on. Even the medical profession, so often held up to us as a model, is itself undergoing a similar change. The general practitioner is disappearing and the physician is becoming an employee. For example, the physicians and surgeons at the Mayo clinic are employees and receive salaries. The patients' fees go to the organization. We already have group practice, clinics where fees are credited to the organization and the physicians are employees. Many industrial establishments employ physicians on salaried basis to supply medical services for employees. We also have large organizations employing physicians to treat industrial accidents. There is a great deal of discussion of whether or not physicians should all be in the employ of the state since health is an important state affair.

With the profession of law, a similar change is taking place. Practically all large corporations carry lawyers on their payroll. Patent lawyers are becoming employees. Individual law practice is disappearing. In the case of the large law firms, only a few are partners; the rest are employees.

Industry itself is undergoing many transformations. Amalgamations and combinations are the order of the day and rightly so, as large units can produce

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AUSTRALIAN CHEMICAL INSTITUTE

Chemical institutes throughout the world seem to have certain troubles in common. The following quotation from the official organ of the Australian Chemical Institute, "Chemical Engineering and Mining Review," should provide food for thought. It is from the May 6, 1929, issue.

"Discussion at the recent general meeting of the Victorian branch of the Australian Chemical Institute showed how little the average member knows of the work carried out in his interests by his state committee and by the council, and how necessary it is for committees to take every opportunity to inform members of their activities.

"The Institute was criticised for inaction—a natural enough criticism from members who are unaware of what is being done. The president and members of committee were apparently able to correct the impression of lack of energy and of a constructive policy, and also to show what is necessary to enable energy to be put to effective use in furthering policy. The statements and explanations made at the meeting reached only the few members who attended; they are, however, of interest, not only to Victorian members, but to those in other states, although the conditions and the problems to be met differ considerably in the several states.

"The principal object of the meeting was to discuss the proposal to increase the subscription to the Institute. The question was asked, 'If we get practically nothing for a guinea, are we likely to get two guineas' worth if the subscription is doubled?' Some members apparently thought that, judged by value received, membership is worth less than a guinea, rather than more.

"Dr. E. J. Hartung, president of the Victorian branch, explained that committees, past and present, had by no means been inactive, but their activities had been severely limited by lack of funds and by the method of financial control which has been in force. The views of the committee of the benefits, which should follow from judicious expenditure, were outlined, and some of them are dealt with below.

"Differing views are held as to how the Institute should function in the interests of its members. It is said, for instance, that meetings should be held regularly for reading and discussion of scientific and technical papers. The Victorian committee holds that this field is amply covered by two existing societies in Melbourne and there is no need or justification for the Institute to enter into competition with them. The attendance at the meetings of these societies does not indicate a demand among chemists for more meetings of the same kind. It is agreed that it is most desirable that members should meet as frequently as possible, personal intercourse being a potent factor in the development of the corporate spirit which should be the first aim of a professional body. Matter for discussion is abundant, assuming that members are interested in what is being done, and to show their interest in the form of constructive suggestion, which, by the way, would make the task of committees easier.

"And here is the first cogent argument for a higher subscription. It is a fact that the Victorian branch has not the money at its disposal to have more meetings than are absolutely necessary. The existing rules allow a remittance of 2/6 out of every subscription to the respective branches. This is quite inadequate for incidental expenses, but no more can be made available after provision has been made for head office expenditure, rent and library grants to states and other standing charges.

"The Victorian branch is associated with other professional bodies in maintaining offices, a joint library and a meeting hall—in short, in making a home—in the city. The benefits which should result from this association to individual members, to the branch, and therefore to the Institute as a whole, are so obvious that they require no discussion, but they are largely denied owing to lack of funds.

"Many advantages would result from the establishment of an office in the Allied Societies Trust's building with clerical assistance shared with other bodies. It would facilitate business and would be a great convenience to members and visitors and to the public. Its greatest advantage would be the relief of part of the burden which now falls on executive officers; these officers, attending to the affairs of 380 members, are occupied with a mass of detail, a volume of correspondence and attention to financial minutiae far exceeding a reasonable load and giving them little or no time for attention to broader questions.

"The lack of co-ordinated policy or even of agreement of fundamentals between the several states has been frequently illustrated. These are, *inter alia*, such questions as standards of qualification, relative merits of courses of training, definition of the work of chemists and of non-professional assistants, and salaries of chemists. It is quite impracticable to arrive at satisfactory agreement on matters of this kind by means of correspondence amongst five branches; even if sufficient clerical assistance were available, real discussion is impossible. The Victorian committee is convinced that periodical conferences between representatives of each state are essential and that means to bring them about must be found. Very considerable expenditure is justified if it will lead to the complete exchange of views, which alone will enable clearly defined lines of policy to be adopted."

The presidential address of R. W. Challinor to the New South Wales Branch of the Australian Chemical Institute is reported in the October 5, 1929, issue, and we quote only one paragraph:

"In all movements of this kind the burden of the spade work falls upon a few, chosen from a great number who are equally willing to share the load, and many others, possessed of enthusiasm equally great but with no desire for the official positions, stand by ready to give a hand to those who have been chosen to navigate the ship. We are all apt to become critical. It is human nature to criticise the manner in which the other fellow tackles a job, but provided the criticism is of a constructive character it proves healthy and progressive. Destructive criticism, on the other hand, like disease in an otherwise healthy body, saps at the vitality of the movement. Those, who at times become restive, ask politely if the Institute is defunct, and want to know what they are getting in return for their subscription, should bear in mind that all members are paying in an equal amount, but many, in addition to this, are cheerfully giving much service and time without a grumble."

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more economically than small. Moreover, a great deal of duplication in the way of research and development is being eliminated with savings to the industry. But all this means the elimination of a certain number of jobs.

In the meanwhile new industries are growing up and new openings for chemists occur. There is great activity in the branches of bio-chemistry which is drawing more men, both because of the grow-

ing interest of chemists in that field and the increased appreciation of the importance of chemistry in biology.

We cannot look to the older professions for guidance but must face our own economic problems and bring to bear to their solution methods such as are used by industrial and consumer organizations. In bringing up the points discussed below, I do not imply that immediate action in full on all the proposals

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THE COUNCIL

The sixty-seventh meeting of the Council of the American Institute of Chemists was held at The Chemists' Club, 50 East 41st Street, New York City, on Friday, November 22, 1929.

President Frederick E. Breithut presided.

The following councillors and officers were present: Messrs. H. R. Moody, W. M. Grosvenor, M. L. Crossley, Allen Rogers, A. P. Sachs, E. C. Bertolet, representative from the Pennsylvania Chapter, L. R. Seidell, C. K. Simon, H. S. Neiman.

The minutes of the previous meeting were read and approved.

The Treasurer reported a balance of \$2,258.25, with all bills paid to date.

Seven fellows and one associate were elected to membership. Their names appear elsewhere in *The Chemist*.

Dr. Breithut presented the names of a number of suggested recipients of the Institute medal, and upon motion made and seconded, the Secretary was directed to send this list to Dr. Byers with a request that he take action relative to the Committee on Medals.

Dr. Moody offered to furnish a list of vacancies from the books of the Bureau of Employment of The Chemists' Club, Inc., for publication in *The Chemist*.

Dr. Moody stated that the new supplementary information blanks of the Bureau of Employment of The Chemists' Club, Inc., carried an inquiry as to whether or not the applicant is a Fellow or Associate of the American Institute of Chemists.

Dr. Grosvenor stated that the Licensing Committee would report at the next meeting as to the conferences with the American Institute of Chemical Engineers.

The Secretary was directed to send a list of the members in arrears to each member of the Council, in order that each member may communicate with some of those indicated upon the list, and advise the Secretary of such actions as are taken.

Upon motion made and seconded a committee was appointed to study the question of minimum fees and salaries and report to the Council. President Breithut appointed Drs. Rogers, Hochstadter and Crossley.

The Secretary reported that he had discussed the question of group insurance with Dr. Mullin of Clemson College, who stated that he would investigate the matter and report. Drs. Grosvenor and Crossley stated that they would also obtain information as to the possibility of group insurance. It was suggested that all of these reports be held until the return of Dr. Arnstein and be then submitted to him.

The Secretary read a letter from Mr. A. M. Peter, University of Kentucky, relative to the licensing of asphalt chemists. Upon discussion it was decided that this matter came within the scope of the present Committee on Licensing.

The Secretary reported relative to the conference he had had with Mr. S. M. Stern, of the Municipal Civil Service Commission, to the effect that Mr. Stern, who is formulating a new classification for chemists, would submit his tentative classification to the Institute for its comment before submitting it to the other interested societies.

The Secretary reported upon the present standing of membership in the Institute and further to the effect that twenty members were delinquent. They had been written repeatedly and, therefore, they have been dropped from the rolls and their names will not appear in the Year Book.

The Secretary reported that he had received advices from Dr. Arnstein in Argentine, that he expected to be present at the December meeting of the Council.

The Secretary read a letter from Dr. J. N. Taylor of the Washington Chapter,

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CHAPTER ACTIVITIES

NEW YORK CHAPTER

The regular monthly meeting of the Chapter was held on November 15th in Room A of The Chemists' Club and was called to order at 8:00 P. M. The minutes of the previous meeting were approved, as was the report of the Treasurer. No other business was transacted.

Dr. George Barsky, Fellow of the Institute, addressed the Chapter on the subject, "Facing Our Economic Problems." His address is published in full in this issue of The Chemist.

A vigorous discussion followed the address in which numbers of those present expressed their views.

On a motion duly made and seconded and passed, the Chairman was authorized to appoint a committee to plan definitely how the Institute could progress to achievement of some of Dr. Barsky's suggestions. The Chairman appointed Dr. Barsky and Messrs. Herstein and Quigley to the committee.

President Breithut called attention to the current issue of The Chemist and traced its history as well as divulging its hopes for the future. He particularly pointed out that its origin and survival through its first hardships were due to the devoted labor of Miss Hoke.

Karl M. Herstein,
Secretary.

PENNSYLVANIA CHAPTER

On Tuesday, November 5th, Mr. J. E. Krauss of the Service Department, E. I.

DuPont de Nemours & Co., Wilmington, Delaware, addressed the Chapter at the Engineers' Club, Philadelphia.

He selected as his topic, "Chemists and Their Employment." He discussed methods used in hiring and rewarding chemists in the employ of his company.

It was the consensus of opinion at this meeting that a second bill for dues should be sent to those who have not yet paid.

Benjamin Levitt,
Secretary.

WASHINGTON, D. C., CHAPTER

The Washington Chapter held a closed meeting November 1st, at which matters of vital importance to the welfare of the Chapter were discussed. Dr. Chas. E. Munroe, Honorary President of the local Chapter, presented a pamphlet, printed many years ago, entitled the Journal of Chemical Industry, for deposit in this Chapter's collection of memorabilia of chemists, which is held in trust by the Congressional Library. The meeting as usual was held in the Cosmos Club and was attended by twelve members.

A special meeting will be held December 5th at which Mr. I. J. Roberts, Past President of the Washington Institute of Bankers, and an official of the Riggs Bank, will deliver an address on, "Organization of chemists from a banker's viewpoint and how chemists can serve the Banking Industry."

A. L. Mehring,
Secretary.

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relative to the activities of that Chapter.

The Budget Committee submitted its budget for 1929-1930, which was adopted with the understanding that the Institute is not restricted to the particular amount of expenditures mentioned therein.

The Secretary submitted the make-up for the Year Book and stated that this would be immediately forwarded to the printer and that all speed would be taken for its production.

EMPLOYMENT NOTES

The Bureau of Employment of The Chemists' Club, Inc., Prof. Herbert R. Moody, Councilor of the American Institute of Chemists, Chairman, has made arrangements to publish in The Chemist a list of positions available through the Bureau. These positions are only a few of those available and are highly specialized and such as fellows of the Institute might find to their advantage to make inquiries about. Communicate directly with Miss Antoinette P. Cramer, Executive Secretary, Bureau of Employment of The Chemists' Club, Inc., 52 East 41st Street, New York City.

It should be understood that Institute members will receive introductions to employers only under the conditions of the Bureau's regular contract.

A letter to the editor from Miss Cramer is quoted below:

"The American Institute of Chemists is co-operating with the Bureau so that some of the better positions listed with the Bureau may be brought to the attention of the Institute's members. The Bureau welcomes correspondence with anyone interested in the following openings:

- 816 Chemical Engineer for operation and maintenance, in the metropolitan district. Salary in the neighborhood of \$3,600 a year.
- 842 A young Ph. D. with good training in agricultural bio-chemistry, to carry on work involving some colloid and physical chemistry. Position in the west at about \$2,700.
- 851 Chemist thoroughly conversant with chemistry, as applied in textiles, to weighting, dyeing and printing problems. Position in the east; attractive offer for a mature man.
- 860 Man with experience in rubber technology, especially rubber tapes or adhesives. Position middle-west.
- 873 Research chemist for research and development in metallurgy, especially alloys and their electrical properties. Position in the east, about \$3,600.
- 877 Chemist or chemical engineer with sales experience. Headquarters in New York City, but the work involves traveling. Would probably offer from \$4,000 to \$5,000.

"We have various positions for men who have received their degrees, either bachelor's, master's, or doctor's, within the last two years."

The application form of the Bureau of Employment of The Chemists' Club, Inc., now bears across its face a supplementary question asking the applicant to indicate whether he is a member of the American Institute of Chemists, or of the American Institute of Chemical Engineers.

Chemical Patent Expert Wanted

"Progressive, rapidly-growing chemical corporation requires full-time services of patent expert capable of assuming executive responsibilities. Applicants should be from 28 to 35 years old and must have graduated in chemistry or chemical engineering from high-grade school. Actual patent experience absolutely essential; reading knowledge of both French and German (or of one, with willingness to learn other) also essential; legal training not essential, but highly desirable. Christians preferred."

Address inquiries to "A-11," Howard S. Neiman, Secretary, 233 Broadway, New York City.

Positions Available In Russia

The Amtorg Trading Corporation, official representatives of the Russian Government, announce through Mr. Karl Dengg of their technical staff, that the Russian Government is seeking three chemists in the Nitrogen Section, two in Sulfuric Acid;

five engineers with mechanical and chemical experience in the Phosphate Section; one on Wood Distillation; three on Chlorine; and fifteen for the construction of Chemical Machinery.

High grade specialists are desired and also some with a lesser requirement of three to five years. In the Chlorine Section the man on electrolysis and the two on bleaching powder and liquid chlorine should have extremely complete experience.

Those interested should communicate in the first instance with Karl Dengg, Chemical Construction Division, Amtorg Trading Corporation, 261 Fifth Avenue, New York City.

U. S. CIVIL SERVICE

Applications for examination for the following positions may now be filed:

<i>Classification</i>	<i>Last Day for Filing Applications</i>	<i>Annual Salary at Entrance</i>
Junior Chemical Engineer	February 4, 1930	\$2,000
Junior Chemist	January 21, 1930	\$2,000
Junior Patent Examiner	February 18, 1930	\$2,000
Assistant Chemist	December 31, 1929	\$2,600—\$3,100
Associate Chemist	December 31, 1929	\$3,200—\$3,700
Physical Chemist	December 31, 1929	\$3,800—\$4,400

Full information may be obtained from the U. S. Civil Service Commission, Washington, D. C., or the Secretary of the U. S. Civil Service Board of Examiners at the postoffice or custom house in any city, for information of the above U. S. Civil Service examinations.

The Standard Oil Company

The Standard Oil Company (N. J.) through the New Products Division of their subsidiary, Stanco, Incorporated, is reaching out for new products that fit the distributing channels of some of the subsidiaries. Herbert P. Pearson, the manager of this New Products Division, writes us:

"In view of the opportunities for gain to the individual who introduces new developments, which I became aware of when I was a consulting chemist, I have no hesitation in asking you if you will assist me should I send you the specifications of the kind of products we are looking for.

"Interested in patent rights covering approved new products, either thoroughly developed in the laboratory or preferably in the production stage, which have and fit into one of the following groups:

Outstanding Selling Points

1. COMPOUNDS obtained by mixing, blending or simple chemical compounding containing some substance derived from petroleum. Salable in bulk to railroads, transportation companies and all classes of large manufacturing plants.
2. PRODUCTS containing some substance derived from petroleum salable to: Manufacturers of Pharmaceuticals, Cosmetics, Food Products and Confectionery, Lacquers; Retailers, Grocery Stores, Drug Stores, Hardware Stores, Department Stores.
3. EQUIPMENT AND DEVICES used by or on: Gasoline Service Stations and Garages, Oil and Gasoline Storage Tanks, Airplanes (connected with gasoline and oil supply).
4. LUBRICATING DEVICES for both oil and grease.

Communicate to Room 816, 26 Broadway, New York City. Telephone Digby 2220."

Facing Our Economic Problems*(Continued from page 6)*

is called for, nor that the Institute has neglected to consider them. My intention is to provoke active discussion. We should plan an active economic program. Membership in the Institute will increase rapidly if the Institute can offer advantages to prospective members. While some projects cannot start until the membership reaches a certain minimum figure, it will reach that figure sooner if we have a definite program.

Employment Service

As producers of chemical service, we require a bureau that will help us sell our product in the face of rapidly shifting and changing markets. This means we must have an employment bureau that is competent to follow the changes of industry; quick to sense new openings for chemists, such as in sales work, in journalistic enterprises; in new industries; capable of advising men of the possibilities in various fields and of the possibilities with various companies. We should all recognize that a certain amount of shifting from job to job really is necessary before a man is placed where his particular qualifications are utilized to the best advantage and we should all like to see the shifting reduced to a minimum.

Although every chemist has to find himself a job at least once, we have as yet done very little to help ourselves in this problem. While it is true that The Chemists' Club does maintain an employment agency, that is not the function of the club but primarily one of the functions of this Institute. In Germany a similar association known as Der Bund der Angestellter Akademiker technisch-naturwissenschaftlicher Berufe does maintain an employment service. It gives advice; twice a week publishes a complete list of all positions advertised anywhere in Germany, and has reached an agreement with the Arbeitgeberverband der Chemischen Industrie Deutschlands that the employment bureau of the Verein deutscher Chemiker is to be given pref-

erence. In this country the United Engineering Societies maintain a well run employment service with offices in New York, Chicago and San Francisco.

It might be pointed out that an efficient employment bureau would give the Institute prestige with the employers by supplying capable men and would also attract chemists to the Institute.

Unemployment Insurance

We must not forget that unemployment of chemists, especially of competent chemists, has a marked effect on the status of the rest. The problem of the unemployed man is really a problem for all of us in the profession if we wish to maintain its dignity and economic return.

For this reason unemployment insurance is something that deserves considerable attention. It represents to us what fire and hurricane insurance represents to others. Unemployment is a calamity due to natural causes and should be faced as such. In Germany there is a form of compulsory unemployment insurance which includes practically all employees earning less than 6,000 marks a year. Der Bund der Angestellte Akademiker in addition assists its unemployed members.

Statistical Surveys

Another duty of the Institute is to compile statistics of the profession just as trade associations compile statistics of the various industries. Manufacturers always keep in close touch with the producing capacity, production and prices. The Department of Commerce keeps elaborate figures on production and prices of various commodities. We should compile regularly figures on salaries, on the influence of education and years of employment on salary, on the number of men engaged in various branches and the average salaries, on unemployment, on the shifting of men from one job to another.

Such statistics would let us know what return we should get for our services and would tend to check the influx of too many men into the field, just as trade

association figures tend to act as a check on over-production.

Combating the Business Cycle

While the status of the chemist in industry is admitted to be one of great importance, yet, as has often been pointed out, in times of business depression he is among the first to suffer. This is not due to a general lack of appreciation of his usefulness but to the fact that he is concerned directly with the production of goods, or, in the case of the research and engineer man, with new means of production or new products. These functions are indeed of little value when business is at a standstill, i. e. when we reach a state of over-production and consumption is below normal due to lack of consumer buying power.

We must combat this by pointing out that the research project, in order to produce maximum financial returns during the period of expansion of production, must be carried through to completion in the period previous, that of the depression. By having sufficient foresight to carry on and complete research projects during a depression, when production and consumption begin to pick up, the manufacturer will be ready to introduce the new, more economical process and the new product.

Insurance

Chemists do not follow their profession with the hope of becoming wealthy. We are chemists primarily because of our interest in the science. We demand a certain amount of comfort, of insurance against emergencies, of a degree of financial security in old age.

Health and accident insurance, life insurance and insurance of security in later years of life are problems on which we might well co-operate. The German association to which I have referred runs its own insurance company, under the

supervision, of course, of the government. Completely mutualized companies are known in this country. While the investment of insurance company funds is regulated by state laws, some influence might be exerted to our general benefit in the investment of such funds.

Credit Union

A Credit Union has for its purpose the loaning of money at interest to members without security on endorsement of notes by two other members. It obtains its funds from the deposits of members who draw interest and it is regulated by state banking laws. There are several credit unions in this city. They are very useful and supply an excellent form of banking service for the salaried person. Der Bund der Angestellte Akademiker performs a similar function for its members.

Banking

There are several banks in this city owned by labor unions. Some have been remarkably successful and one, I know, has in emergency financed a manufacturer who employed members of the union. There is a discernable tendency toward this type of bank just as there is a tendency for the large corporation to go in for banking, examples of which are the General Motors Acceptance Corporation, and the extension of long-term credits to foreign nations by the General Electric Co.

Investment Trust

Many of us own shares of industrial and other stocks but our scattered holdings have no influence and little voice in the various enterprises. We are vitally concerned with the management and growth of industry and we should take a more active hand by pooling our investments. Such co-operation would enable us to employ competent people to advise us, whereas now individual investment is very much a matter of chance.*

***THE EDITOR CORDIALLY INVITES SIGNED DISCUSSION OF DR. BARSKY'S ADDRESS. TO BE SUITABLE FOR PUBLICATION, COMMENT SHOULD BE DEFINITELY PERTINENT AND CONDENSED.**

NEW MEMBERS

Elected November 22, 1929

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